

An Analysis of the Nexus Between Government Health Expenditure and Key Health Indicators in India: A Longitudinal Study from 2013-14 to 2021-22: Reg No: 373

Amos Allan Subba, Abuk Mawien Anei, Naveditta Gopal, Shivshankar Tiwari, Varsha Maindola
Uttaranchal University

CORRESPONDING AUTHOR

Dr Amos Allan Subba, Uttaranchal University

Email: amosasubba@yahoo.in

CITATION

Subba Amos Allan, Anei Abuk Mawien, Naveditta Gopal, Tiwari Shivshankar, Maindola Varsha. An Analysis of the Nexus Between Government Health Expenditure and Key Health Indicators in India: A Longitudinal Study from 2013-14 to 2021-22: Reg No: 373. Journal of the Epidemiology Foundation of India. 2025;3(2Suppl):76.

DOI: <https://doi.org/10.56450/JEFI.2025.v3i2Suppl.076>

ARTICLE CYCLE

Received: 10/11/2025; Accepted: 20/12/2026; Published: 31/12/2025

This work is licensed under a Creative Commons Attribution 4.0 International License.

©The Author(s). 2026 Open Access

ABSTRACT

Background: India has a complex health finance system comprising public and private financing. Despite the presence of a public healthcare system, the private sector is the major contributor to the healthcare services in India. Analyzing the relationship between government health expenditure and public health outcome is crucial, witnessing a shift in public health spending in recent years. This study helps understand how health expenditure trends align with major health indicators. **Aim:** This paper analyzes the correlation between Government of India's health expenditure - measured across GDP (Gross Domestic Product), THE (Total Health Expenditure) - and the critical health indicators - neonatal, infant, child and maternal mortality rates and life expectancy at birth, over the study period 2013-14 to 2021-22. **Methods:** A longitudinal trend analysis was conducted for the period 2013-2021 using secondary published data. Health expenditure data were sourced from National Health Accounts (NHA) - India, and key health indicators were obtained from United Nations Inter-Agency Group for Child Mortality Estimation (UN-IGME) and the World Bank. **Results:** The Pearson correlational model demonstrated a significant inverse relationship between public health financing and mortality. GHE as a percentage of THE shows near-perfect negative correlation with NMR ($r = -0.95$), IMR ($r = -0.96$) and U5MR ($r = -0.95\%$). Contrariwise, OOPE as a percentage of THE showed a strong near-positive relationship against NMR ($r = 0.96$), IMR ($r = 0.97$) and U5MR ($r = 0.97$). Moreover, sustained rise in per capita GHE is associated with reduced MMR. **Conclusion:** The study is evident of a positive association between increased public health expenditure and improved public health indicators in India. The findings demonstrate a transition from private and OOPE spending towards increased public health investment, which strongly correlates with positive public health indicators.

KEYWORDS

Government Health Expenditure (GHE); Out-of-Pocket-Expenditure (OOPE); Child Mortality; Maternal Mortality